








Work Order ID 53884

November 23, 2009 11:22:27 AM




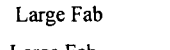
Page 1


Item ID: D3407-041 Accept  Setup Start 
Revision ID: E Stop 
Item Name: Tow Ring
Start Date: 23/11/2009 Start Qty: 8.00  Cust Item ID:
Required Date: 27/11/2009 Req'd Qty: 8.00  Customer:
Reference:


Approvals: Process Plan: BT Date: 09/11/23 Tooling: _____ Date: _____
QC: _____ Date: _____ SPC (Y/N): _____ Date: _____
Run Start 
Stop 

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
--------------------------------	--------------------------	----------------------	----------------	--------------	--------------	---------------	---------------	------------------	----------------

Draw Nbr	Revision Nbr
D3407	Rev E

100  Large Fab 0.00
 Large Fab Memo 0.00
Large Fab Weld D3407-1/-5 using welding rod TIG174 as per Dwg D3407 & QSI 004
A/R TIG174 ROD Batch: M101972 09/11/30 8x

110  QC 0.00
Quality Control Memo 0.00 (8) 09/11/30

120  QC 0.00
Quality Control Memo 0.00 2) 8 or 11/30 (8) 09/11/30

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

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Page 2

Item ID: D3407-041	Accept		Setup	Start	
Revision ID: E				Stop	
Item Name: Tow Ring					
Start Date: 23/11/2009	Start Qty: 8.00		Cust Item ID:		
Required Date: 27/11/2009	Req'd Qty: 8.00		Customer:		

Reference:						Run	Start	
Approvals:	Process Plan:	Date:	Tooling:	Date:			Stop	
	QC:	Date:	SPC (Y/N):	Date:				

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Draw Number	Draw Rev.	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 Powdercoat Powder Coating	White Gloss(Ref:4.3.5.1) per OSI005 4.3-Alum <i>M110148</i> Memo **Mask Threaded Section** START TIME: <i>11:45</i> OVEN TEMPERATURE: <i>400°</i> FINISH TIME: <i>12:15</i>	0.00 0.00		<i>09-12-01</i>	<i>(S)</i>				
140 QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00		<i>09/12/01</i>	<i>(X8)</i>		<i>0</i>		
150 Packaging Packaging	Identify as per dwg & Stock Location: <i>469</i> Memo	0.00 0.00			<i>09/12/02</i>		<i>(R)</i>		

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Work Order ID 53884

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Page 3

Item ID: D3407-041

Accept



Setup Start



Revision ID: E

Stop



Item Name: Tow Ring

Start Date: 23/11/2009 Start Qty: 8.00



Cust Item ID:

Required Date: 27/11/2009 Req'd Qty: 8.00



Customer:

Reference:

Run Start



Approvals: Process Plan: _____ Date: _____ Tooling: _____ Date: _____

Stop



QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Sequence ID/
Work Center IDOperation
DescriptionSet Up/
Run HoursDraw
NumberDraw
Rev.Plan
CodeAccept
QtyReject
QtyReject
NumberInsp.
Stamp

160

QC21- Final Inspection - Work Order Release

0.00



QC

Memo

0.00

Quality Control

09/12/03 *[Signature]**mf*
09-12-02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: _____ PAR #: _____ Fault Category: _____ NCR: Yes No DQA: _____ Date: _____

Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Picklist Print

November 23, 2009 11:22:34 AM

Page 1

Work Order ID: 53884



Parent Item: D3407-041RevE



Parent Item Name: Tow Ring

Start Date: 23/11/2009

Required Date: 27/11/2009

Comments:

Start Qty: 8.00

Required Qty: 8.00

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Remaining Qty To Pick	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	--------------------------	---------------	----------------	--------

D3407-1RevE

Manufactured

No

100

Each

56.0000

8.0000



Stem

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

ST

56

52317

25

52650

9

52902

22

7x
1x

09/11/27

D3407-5RevE

Manufactured

No

100

Each

14.0000

8.0000



Ring

Warehouse

Loc Qty

Loc Code

Location

Main Warehouse

WA

14

53452

14

53883

2x

6x

09/11/27

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

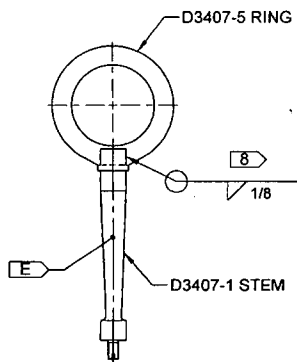
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Resolution: _____ Disposition: _____ QA: N/C Closed: _____ Date: _____

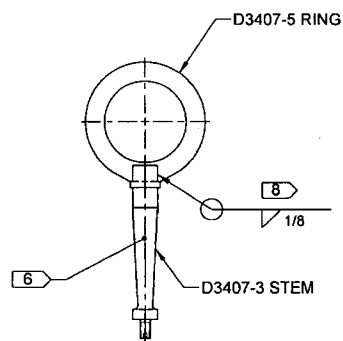
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DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

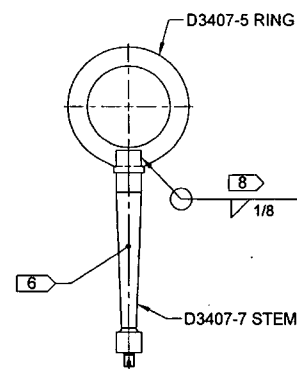
QTY -041	QTY -043	QTY -045	PART NUMBER	DESCRIPTION
X			D3407-041	TOW RING
	X		D3407-043	TOW RING
		X	D3407-045	TOW RING
1			D3407-1	STEM
	1		D3407-3	STEM
1	1	1	D3407-5	RING
		1	D3407-7	STEM



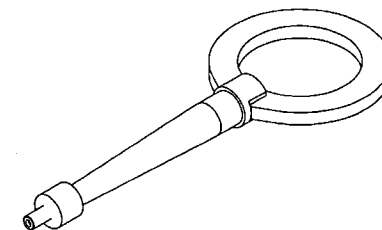
D3407-041 TOW RING



D3407-043 TOW RING



D3407-045 TOW RING



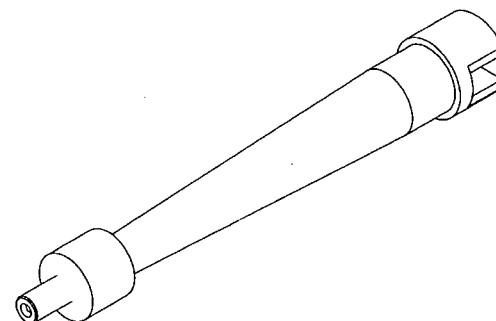
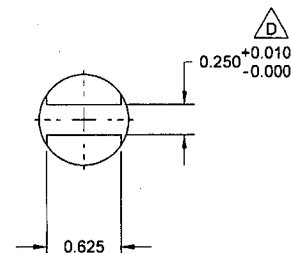
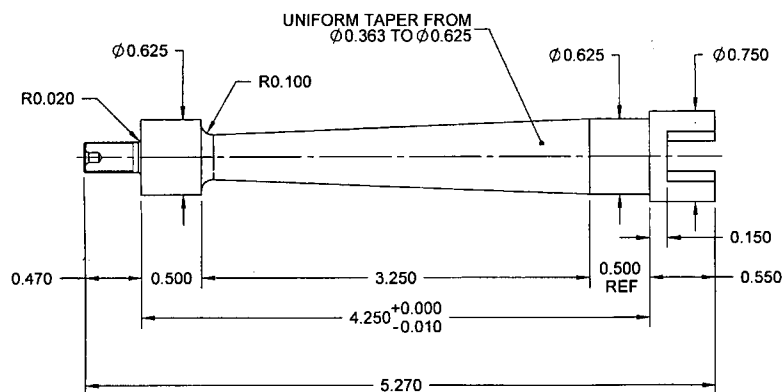
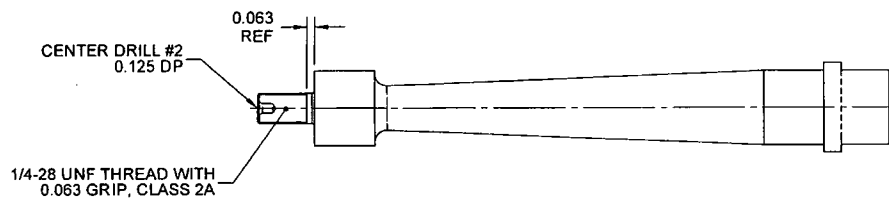
SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 53884
B109-11-23

RELEASED
07-08-01-11-11

NOTES:

- 1) MATERIAL: N/A
- 2) FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3 (EXCEPT THREADS)
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: N/A
- 6) IDENTIFICATION: IDENTIFY WITH DART P/N "D3407-XXX" USING BLACK FINE POINT PERMANENT INK MARKER
- 7) WEIGHT: D3407-041 - 0.60 lbs, D3407-043 - 0.53 lbs, D3407-045 - 0.61 lbs
- 8) WELD PER DART QSI 004 ON ALL EDGES BETWEEN STEM AND RING

E	ADD D3407-045 (ZN B2-1, D8-1); ADD D3407-7 (ZN B6-5); REVISED NOTE 8 TO ADD IDENTIFICATION (ZN A5-1); REASON: PRODUCTION FACILITY	PH	08.07.23
D	D3407-1/3 SLOT WAS ROUND NOW FLAT FOR ASSEMBLY WITH D3407-5 (ZN C2-2, C2-3); D3407-5 WAS ROUND NOW FLAT ON ONE END FOR ASSEMBLY WITH D3407-1/3 (ZN B6-4); REASON: PRODUCTION FACILITY	PH	08.04.07
C	-1/3 LONGER FOR FIT W/WASHER	CP	05.09.09
B	UPDATE DIAMETER, THREAD CLASS ADDED	CP	05.08.17
A	NEW ISSUE	CP	05.03.16
REV.	DESCRIPTION	BY	DATE
DESIGN		DART AEROSPACE USA, INC. PORT HADLOCK, WA DRAWING NO. D3407 TITLE TOW RING REV. E SHEET 1 OF 5 SCALE NTS COPYRIGHT © 2005 BY DART AEROSPACE USA, INC. THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE USA, INC.	
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CHECKED			
MFG. APPR.			
APPROVED			
DE APPR.			
DATE	08.07.23		

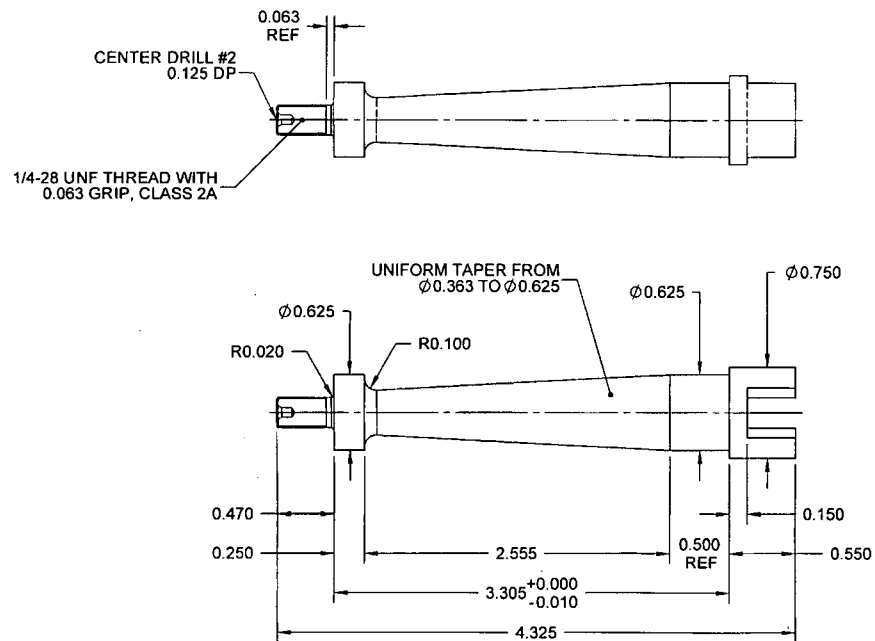


D3407-1 STEM

- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.33 lbs

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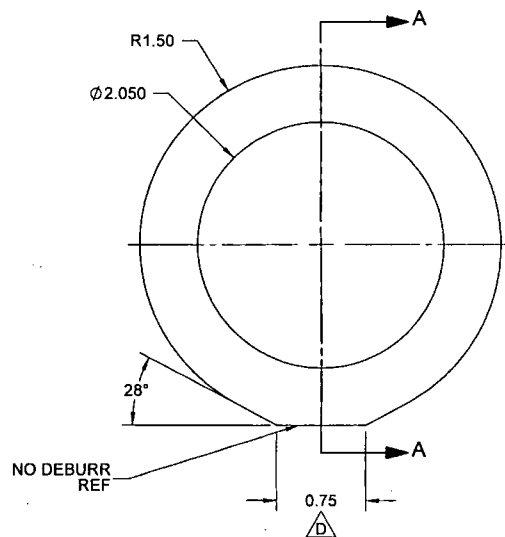


D3407-3 STEM

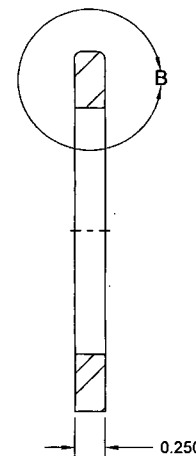
NOTES:

- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
- 2) FINISH: NONE
- 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) UNITS: INCHES UNLESS OTHERWISE NOTED
- 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
- 6) IDENTIFICATION: N/A
- 7) WEIGHT: 0.27 lbs

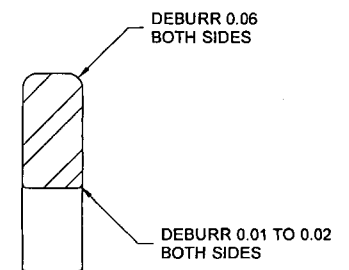
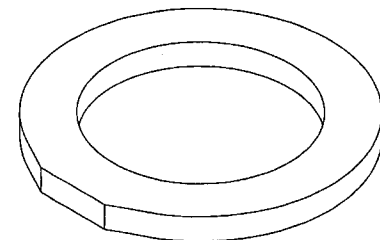
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MFG. APPR.	W/0	D3407	SHEET 3 OF 5
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D3407-5 RING





SECTION A-A



**DETAIL B
SCALE 2X**

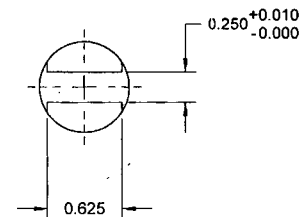
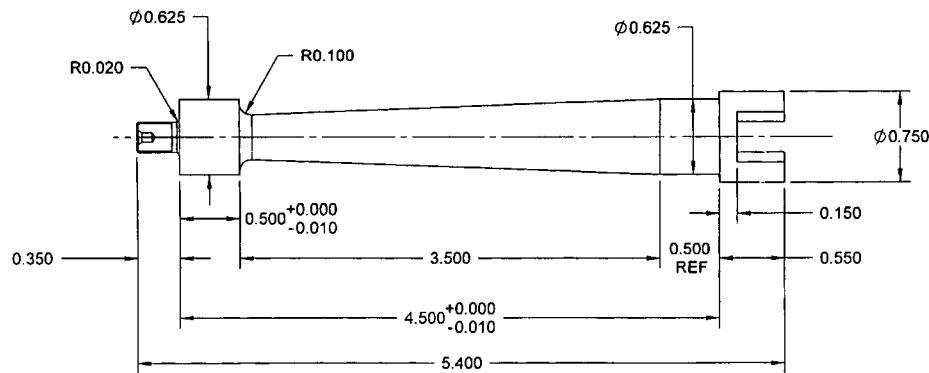
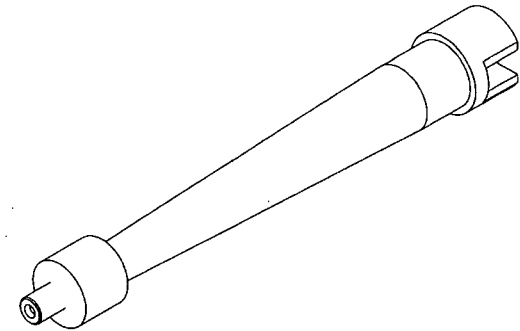
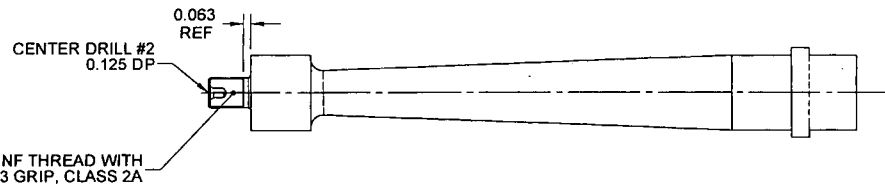
RELEASED
08-08-2023


- NOTES:**
 1) MATERIAL: 17-4 PH SS BAR PER AMS 5604/5643 (REF. DART SPEC M17-4-B)
 2) FINISH: NONE
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: N/A
 6) IDENTIFICATION: N/A
 7) WEIGHT: 0.27 lbs

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MFG. APPR.		D3407	SHEET 4 OF 5
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W10 535841

8 7 6 5 4 3 2 1



 **D3407-7 STEM**

RELEASED
08-09-01 MJP

w/lo 53584

- NOTES:
- 1) MATERIAL: 17-4 PH SS ROUND BAR PER AMS 5643 (REF. DART SPEC M17-4-R)
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: MACHINE ALL INSIDE EDGES WITH A 0.010 RADIUS
 - 6) IDENTIFICATION: N/A
 - 7) WEIGHT: 0.34 lbs

DESIGN	AJS	DART AEROSPACE USA, INC.	
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CHECKED	<i>[Signature]</i>	DRAWING NO.	REV. E
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8 7 6 5 4 3 2 1